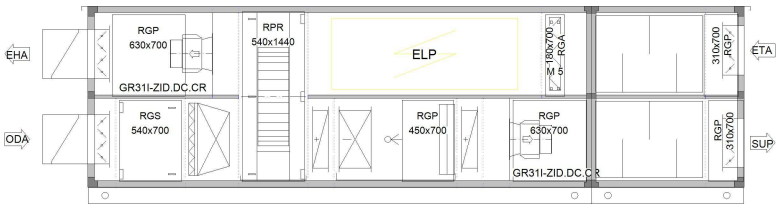
ROCCHEGGIANI®
care for air

Unit size	**CTA 10.7**
Supply air	**2.600 [m³/h]**
Return air	**2.300 [m³/h]**

Offer	**UTA 24001856**
Project date	**26/09/2024**
User	
Project	**DC 30MW IT - Milano**
Position	**2.0**
Description	**UTA Uffici DC01**



airCalc++ Vers. P 5.0.1 (released on 9/26/2024)

Dimensional features

total length [mm]	Total width [mm]	total height [mm]	Net weight [kg]
5.500,0	**1.040,0**	**1580,0**	**~1.278,00**

Construction features (pay attention to possible local changes in the materials on single section)

Profiles	**F54TT - Aluminium Thermal Break**	*Monobloc unit: internal dividing panels 25 mm thick*			
Corners	**Nylon**				
Panel outside	**Galvanized prepainted RAL 9010**	Thickness	**0,50**	**[mm]**	
Panel inside	**Galvanized prepainted RAL 9010**	Thickness	**0,50**	**[mm]**	
Panel inside bottom	**Galvanized prepainted RAL 9010**	Thickness	**0,50**	**[mm]**	
Guides and int. frame	**Galvanized steel**				
Insulation	**Polyurethane foam 45 kg/m3**	Thickness	**54,0**	**[mm]**	
Roof	**Galvanized prepainted**				

Acoustic features

Frq.[Hz]	63	125	250	500	1000	2000	4000	8000	Sum [dB(A)]
Break out airborne sound power [dB]	**57,0**	**60,0**	**75,0**	**65,0**	**66,0**	**63,0**	**41,0**	**28,0**	**71,0**

Thermal and mechanical performance of casing

Certified mechanical performances due to EN 1886:2007

Mechanical stability	**D1(M)**
Casing leakage -400 Pa	**L1(M)**
Casing leakage +700 Pa	**L1(M)**
Panel reaction to fire class due to UNI 9177:	**1 (ONE)**
Filter by-pass leakage	**F9**

Certified mechanical performances due to EN 1886:2007

Thermal transmittance class	**T2**
Thermal bridge class	**TB2**

Performance declaration - Eurovent

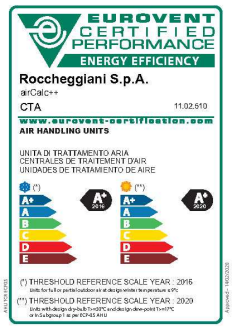
MB Range	**11.02.510**
MB Casing	**Pr05/Zn05-F54-TT-PU**
Type of unit	**External unit**

HRS Winter Thermal eff. (1:1)	(dry)	**77,00**	(EN 308)
HRS Summer Thermal eff. (1:1)		**75,8**	(EN 308)
HRS Summer Humidity eff. (1:1)		**72,50**	(EN 308)

EUROVENT CERTIFIED PERFORMANCE
AHU N° 11.02.510
Range: CTA
www.eurovent-certification.com

Energy performance declaration

Specific fan power [W/(m3/s)]	**2.044 [SFP4]**
Used lowest temp. [°C]	**-5,00**
Recirculation [%]	
Air velocity [m/s]	**1,13**
air density [kg/m³]	**1,20**
A.s.l.m. [m]	**0**
Reference city	**Ancona**
Factor Fs-Pref (wint. cond.)	**0,79**
Factor Fs-Pref (summ. cond.)	**0,68**



Energy label class designed for wet condition

Dichiarazione di prestazione Ecodesign 1253-2014

Calculation valid	**Yes**	thermal efficiency	**77,00**
ErP Ready 2016	**Yes**	directional unit type	**BVU - NRVU**
ErP Ready 2018	**Yes**	Motor and drive type	**variable speed**
Specific fan power internal	**763**	external leakage rate at +400 Pa	**0,10**
effective electric power input	**1,630**	external leakage rate at -400 Pa	**0,07**
type of heat recovery system	**other HRS**	internal leakage rate at 200 Pa	**1,50**

ErP 2018 COMPLIANT

Supply air

Unit definition

Unit size	**CTA 10.7**	**F54TT**			
Airflow [m³/h]	**2.600**	Air velocity [m/s]	**1,13**	Length [mm]	**5.500,0**
Ext. pressure [Pa]	**300**	Class DIN EN 13053	**V1**	Width [mm]	**1.040,0**
Tot. pressure [Pa]	**934**			Height [mm]	**770,0**
				Net weight [kg]	**~1.278,0**

Empty section	Supply air	**235,0 mm**	**0,81 m2**	**37 Pa**

Damper: Dimensions [mm] **551,5 x 410,0 x 125,0**

Width [mm]	**551,5**	Airflow [m³/h]	**2.600**	Material	**Aluminium**
Height [mm]	**410,0**	Air velocity [m/s]	**3,19**	Actuated by	**Ready for actuator**
Depth [mm]	**125,0**	Pressure drop [Pa]	**8**		

Intake / Outlet hood Dimensions [mm] **600,0 x 410,0 x 380,0**

Width [mm]	**600,0**	Airflow [m³/h]	**2.600**	Material	**Peraluman**
Height [mm]	**410,0**	Air velocity [m/s]	**2,94**		
Depth [mm]	**380,0**	Pressure drop [Pa]	**29**		

Damper actuator **GMA126.1E**

Quantity	**1**	Mode	**on/off**	Voltage [V]	**24**
Supplier	**Siemens**	torque [Nm]	**7,000**	Current [A]	**0,21**
				Protection	**IP54**

Empty section	Supply air	**580,0 mm**	**1,24 m2**	**Pa**

Door with hinge and single lever Dimensions [mm] **540,0 x 700,0**

1 Pcs **FTK+ 270 VVS NTC10K Temperature and humidity prøbe (0-10V)**

Bag Filter section with prefilter	Supply air	**450,0 mm**	**0,94 m2**	**168 Pa**

Manufacture	**Roccheggiani**	Filter length [mm]	**48,0**
Type	**V-PF-G4-48**	Filter surface [m2]	**0,79**
Class (EN 779:2012)	**G4**	Cells pcs x size	**1** x **V-PF-G4-48** **492,0** x **592,0**
Class (ISO 16890)	**Coarse 55%**		**1** x **V-PF-G4-48** **290,0** x **592,0**
Clean dP [Pa]	**36**		
Dirty dP [Pa]	**86**		
Applied dP [Pa]	**61**		
Airflow [m³/h]	**2.600** **1,56 m/s**		
Filter handling	**Dirty air widthdrawal**		

Manufacture	**Roccheggiani**	Filter length [mm]	**292,0**
Type	**V-BF-F9-292**	Filter surface [m2]	**24,00**
Class (EN 779:2012)	**F9**	Cells pcs x size	**1** x **V-BF-F9-292** **492,0** x **592,0**
Class (ISO 16890)	**ePM1 85%**		**1** x **V-BF-F9-292** **290,0** x **592,0**
Clean dP [Pa]	**57**		
Dirty dP [Pa]	**157**		
Applied dP [Pa]	**107**		
Airflow [m³/h]	**2.600** **1,56 m/s**		
Filter handling	**Dirty air widthdrawal**		
Material frame	**Galvanized steel**	Filter energy class	**B**

1 Pcs	**DPE2500 for airflow measurement**	**-**

Position **UTA Uffici DC01**

Heat wheel in casing	Supply air	**580,0 mm**	**2,51 m2**	**203 Pa**

EM0920x0920-0820V-018-2D0OO-6BP0-A

Heating mode

Supply [m³/h]	**2.600**		
Entering [°C]	**-5,00**	Humidity [%]	**80,0**
Leaving [°C]	**12,00**	Humidity [%]	**63,0**
Pressure drop [Pa]		**201**	
Standard pressure drop (1.2 kg/m3) [Pa]		**189**	
Exhaust [m³/h]	**2.300**		
Entering [°C]	**20,00**	Humidity [%]	**50,0**
Leaving [°C]	**-1,00**	Humidity [%]	**87,0**
Pressure drop [Pa]		**181**	
Standard pressure drop (1.2 kg/m3) [Pa]		**152**	
Tot. recovery capacity [kW]	**25,38**		
Sens. recovery capacity [kW]	**16,83**		

Cooling mode

Supply [m³/h]	**2.600**		
Entering [°C]	**31,90**	Humidity [%]	**60,0**
Leaving [°C]	**27,40**	Humidity [%]	**55,2**
Pressure drop [Pa]		**203**	
Standard pressure drop (1.2 kg/m3) [Pa]		**163**	
Exhaust [m³/h]	**2.300**		
Entering [°C]	**26,00**	Humidity [%]	**50,0**
Leaving [°C]	**30,90**	Humidity [%]	**57,8**
Pressure drop [Pa]		**199**	
Standard pressure drop (1.2 kg/m3) [Pa]		**148**	
Tot. recovery capacity [kW]	**14,92**		
Sens. recovery capacity [kW]	**3,70**		

thermal efficiency [%]	**68**	(EN 308)	thermal efficiency [%]	**76**	(EN 308)
Humidity efficiency [%]	**67,9**		Humidity efficiency [%]	**71,3**	
Energy efficiency class [%]	**H1**	(EN 13053)	OATR [%]	**1,13**	
Energy efficiency [%]	**74,10**	(EN 13053)	OACF	**1,04**	

control type **Constant 40W** **Constant drive 3x380-420V**

Nominal data

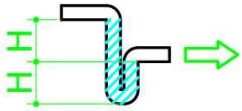
Nominal power [kW] **0,040** nominal current [A] **0,22** nominal voltage [V] **3x400**

Pressure Door Dimensions [mm] **540,0 x 1.440,0**

Drain pan (35) Material **AISI 304** Drain connection **1 1/4"**

Water trap selection

Minimum height H [mm] **94**



Heating coil	Supply air	**220,0 mm**	**0,42 m2**	**17 Pa**

Airflow [m³/h]	**2.600**			Medium	**Water**
Air velocity [m/s]	**1,98**			Med. Flow [l/s]	**0,4300**
Air in [°C]	**12,00**	Humidity [%]		Med. velocity [m/s]	**1,11**
Air out [°C]	**22,24**	Humidity [%]	**32,9**	Med. in [°C]	**45,00**
Capacity [kW]	**9,00**			Med. out [°C]	**40,00**
Air press. Drop [Pa]	**17**			Med. pres. drop [kPa]	**12,68**

P40-16 AC 1R-12T-760A-2.0Pa Cu/Al

Rows	**1**
Circuits	**2**
Fin space [mm]	**2,00**
Connection in	**1 0/0"**
Connection out	**1 0/0"**

Materials:

Fins	**Aluminium**
Pipes	**Copper**
Header	**steel painted**
Frames	**Galvanized steel**
Fin protection	**-**

1 Pcs **H2O valve 3 Way_PN16 VXG44.20-6.3+SAS61.03 - DN20 - Kvs=6,3 - PN16**

1 Pcs **Technical cabinet TC** Dimensions [m] **2.375 x 1.648 x .72**

panel thickness	**25 mm**	Profiles	**Aluminium**
Panel inside	**Galvanized prepainted**	Insulation	**Polyurethane foam**
Panel outside	**Galvanized prepainted**	With support pins	**Yes**
Panel inside bottom	**No**	With baseframe	**No**

Position **UTA Uffici DC01**

Coil cooling with steam humidifier	Supply air	**1.030,0 mm**	**2,28 m2**	**132 Pa**

Airflow [m³/h]	**2.600**			Medium	**Water**
Air velocity [m/s]	**2,01**			Med. Flow [l/s]	**0,9790**
Air in [°C]	**27,40**	Humidity [%]		Med. velocity [m/s]	**1,26**
Air out [°C]	**12,97**	Humidity [%]	**98,2**	Med. in [°C]	**7,00**
Total capacity [kW]	**19,98**			Med. out [°C]	**12,00**
Sens. capacity [kW]	**12,81**			Med. pres. drop [kPa]	**34,17**
Air press. Drop [Pa]	**113/83**	(wet/dry)		SHR	**0,63**

P40-16 AR 5R-12T-750A-2.5Pa Cu/Al

Rows	**5**
Circuits	**4**
Fin space [mm]	**2,50**
Connection in	**1 1/4"**
Connection out	**1 1/4"**

Materials:

Fins	**Aluminium**
Pipes	**Copper**
Header	**steel painted**
Frames	**Galvanized steel**
Fin protection	**-**

1 Pcs **H2O valve 3 Way_PN16 VXG44.20-6.3+SAS61.03 - DN20 - Kvs=6,3 - PN16**

Steam humidifier - steam distributor codes **UE010YL001 - D061503000**

nos. of distributors	**1**	Temperature in [°C]	**22,24**	Humidification [kg/h]	**8,00**
lance length [mm]	**615,0**	Air On Relative humidity [%	**32,9**	Nominal power [kW]	**7,500**
		Air Off Relative humidity [%	**48,0**	Voltage [V]	**3x400**

Steam humidifier supplied loose, commissioning not included
Steam pipe not supplied

The humidifier, supplied loose with the unit, must be installed and programmed by the customer according to the instructions given in the manufacturer's manual.

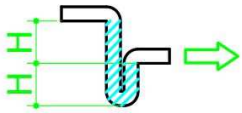
Likewise, the connection pipes between the humidifier and the distribution system must be created by the customer according to the requirements of the same manual.

Removable panel Dimensions [mm] **450,0 x 700,0**

Drain pan (55) Material **AISI 304** Drain connection **1 1/4"**

Water trap selection

Minimum height H [mm] **94**



Drip eliminator (P.28) Model **SE130** Frame **AISI 304** Fins **PPTV** **19 Pa**

1	Pcs	**Technical cabinet connected to previous TC**	**-**
1	Pcs	**AKF10+ NTC10k Temperature probe (-50/150°C)**	**-**
1	Pcs	**TF30 Antifreeze thermostat -10 to 10°C 3 m capillar**	**-**

Position UTA Uffici DC01

Heating coil	Supply air	220,0 mm	0,42 m2	25 Pa

Airflow [m³/h]	2.600			Medium	Water
Air velocity [m/s]	1,98			Med. Flow [l/s]	0,5260
Air in [°C]	12,97	Humidity [%]	98,1	Med. velocity [m/s]	1,36
Air out [°C]	25,40	Humidity [%]	45,2	Med. in [°C]	45,00
Capacity [kW]	11,00			Med. out [°C]	40,00
Air press. Drop [Pa]	25			Med. pres. drop [kPa]	26,85

P40-16 AC 2R-12T-760A-4.0Pa Cu/Al

Rows	2
Circuits	2
Fin space [mm]	4,00
Connection in	1 0/0"
Connection out	1 0/0"

Materials:

Fins	Aluminium
Pipes	Copper
Header	steel painted
Frames	Galvanized steel
Fin protection	-

1	Pcs	H2O valve 3 Way_PN16 VXG44.15-4+SAS61.03 - DN15 - Kvs=4 - PN16	
1	Pcs	Technical cabinet connected to previous TC	-

Empty section	Supply air	220,0 mm	0,42 m2	Pa

1	Pcs	Technical cabinet connected to previous TC	-

Offer	**UTA 24001856**	Position	**2.0**	**airCalc Vers.**	**P 5.0.1 (released on 9/26/2024)**
Project	**DC 30MW IT - Milano**				**26/09/2024**
Position	**UTA Uffici DC01**				

Plug fan	Supply air	**685,0 mm**	**1,46 m2**	**Pa**

Fan	**GR31I-ZID.DC.CR**	Motor	**ECblue-IE5-50-116-0-2.4**	**IE5**
Air volume [m³/h]	**2.600**	Protection	**IP55**	
External static [Pa]	**300**	Insulation class	**F**	
dynamic pressure [Pa]	**14**	Voltage	**3x400 V / 50 Hz**	
Total static pressure [Pa]	**920**	Power [kW]	**2,400**	
Total pressure [Pa]	**934**			
Speed [1/min]	**2.793**	Speed [1/min]	**3.700**	
efficiency %	**62,9**	System absorbed power [kW]	**1,070**	
		nominal current [A]	**3,61**	
Supplier	**Ziehl-Abegg**			
Code	**ZAB-116889/A01-3/400/50**	*The system effect is considered in the performance of the fan*		

K-factor [m³/h] **136** [ρ = 1,2 kg/m³] ($Q = k\sqrt{\Delta p}$)

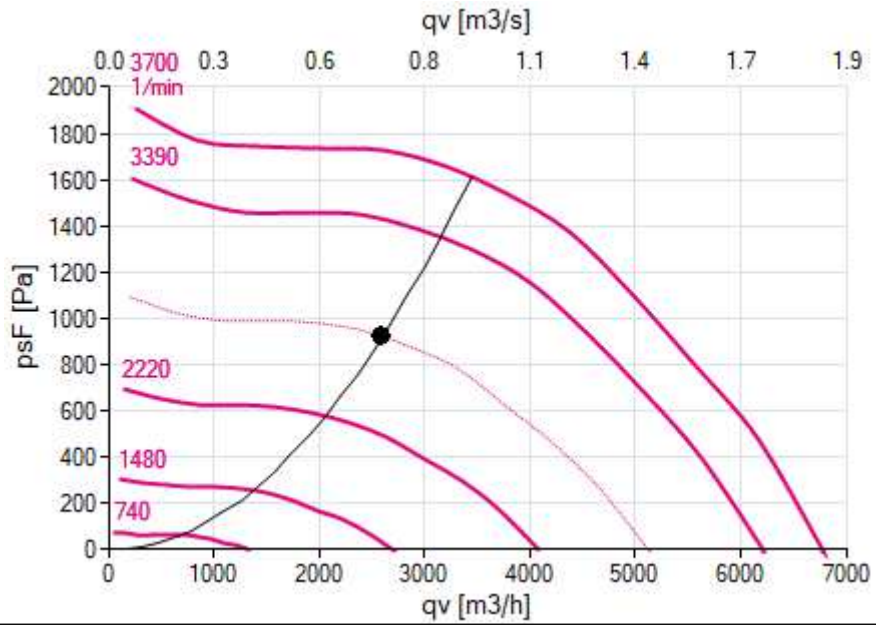
K-factor [adim] **105** ($Q = k\sqrt{\Delta p \frac{2}{\rho}}$)

Fan octave band sound power level (Lokt) [dB]

Frq.[Hz]	63	125	250	500	1000	2000	4000	8000
Inlet	**67,0**	**68,0**	**81,0**	**71,0**	**65,0**	**63,0**	**60,0**	**57,0**
Outlet	**70,0**	**73,0**	**86,0**	**76,0**	**76,0**	**76,0**	**72,0**	**69,0**

Control Signal (0-10V) **7,50**

Specific fan power [W/(m3/s)] **1.320** **SFP2**



1 Pcs	**DPE2500 Flow LCD for airflow measurement**	**-**	
1 set	**Tube for airflow measurement**	**-**	
Removable panel		Dimensions [mm]	**630,0 x 700,0**
Opening	**L**	Dimensions [mm]	**280,0 x 280,0**
1 Pcs	**Technical cabinet connected to previous TC**	**-**	
1 Pcs	**FTK+ 270 VVS NTC10K Temperature and humidity prøbe (0-10V)**		

Sound attenuator	Supply air	**955,0 mm**	**2,08 m2**	**4 Pa**

Type	**Standard**
Lenght [mm]	**900,0**
Sound attenuator splitter thickness [mm]	**200,0**
splitter frame quality	**Galvanized steel**

Frq [Hz]	63	125	250	500	1000	2000	4000	8000
Abs [dB]	**4,0**	**7,0**	**16,0**	**28,0**	**41,0**	**34,0**	**22,0**	**14,0**

Empty section	Supply air	**325,0 mm**	**0,62 m2**	**7 Pa**

Removable panel Dimensions [mm] **310,0 x 700,0**

Damper: Dimensions [mm] **600,0 x 410,0 x 125,0**

Width [mm]	**600,0**	Airflow [m³/h]	**2.600**	Material	**Aluminium**
Height [mm]	**410,0**	Air velocity [m/s]	**2,94**	Actuated by	**Ready for actuator**
Depth [mm]	**125,0**	Pressure drop [Pa]	**7**		

Damper actuator **GMA126.1E**

Quantity	**1**	Mode	**on/off**	Voltage [V]	**24**
Supplier	**Siemens**	torque [Nm]	**7,000**	Current [A]	**0,21**
				Protection	**IP54**

Noise calculation

Sound power level [dB]

Frq.[Hz]	63	125	250	500	1000	2000	4000	8000	Sum [dB(A)]
Inlet	**65,0**	**58,0**	**69,0**	**55,0**	**46,0**	**42,0**	**35,0**	**31,0**	**61,3**
Outlet	**66,0**	**66,0**	**70,0**	**48,0**	**35,0**	**42,0**	**50,0**	**55,0**	**62,8**
Casing	**57,0**	**60,0**	**75,0**	**65,0**	**66,0**	**63,0**	**41,0**	**28,0**	**71,0**

sound pressure level [dB]

Frq.[Hz]	63	125	250	500	1000	2000	4000	8000	Sum [dB(A)]
Inlet	**57,1**	**50,1**	**61,1**	**47,1**	**38,1**	**34,1**	**27,1**	**23,1**	**53,4**
Outlet	**58,1**	**58,1**	**62,1**	**40,1**	**27,1**	**34,1**	**42,1**	**47,1**	**54,9**
Casing	**49,1**	**52,1**	**67,1**	**57,1**	**58,1**	**55,1**	**33,1**	**20,1**	**63,1**

measuring point at **1 m** of distance

The calculated sound pressure values remain valid only in the case of free and hemispherical radiation from the noise source.
Other sources of noise, the acoustics of the room, other sources of vibration and the installed air ducts can influence these values, so the values possibly measured in the installation site may differ from those indicated.

Exhaust air

Unit definition

Unit size **CTA 10.7** **F54TT**

Airflow [m³/h]	**2.300**	Air velocity [m/s]	**1,00**	Length [mm]	**5.500,0**
Ext. pressure [Pa]	**250**	Class DIN EN 13053	**V1**	Width [mm]	**1.040,0**
Tot. pressure [Pa]	**560**			Height [mm]	**770,0**
				Net weight [kg]	~

Position UTA Uffici DC01

Empty section	Exhaust air	**325,0 mm**	**0,87 m2**	**5 Pa**

Removable panel — Dimensions [mm] **310,0 x 700,0**

Damper: — Dimensions [mm] **600,0 x 410,0 x 125,0**

Width [mm]	**600,0**	Airflow [m³/h]	**2.300**	Material	**Aluminium**
Height [mm]	**410,0**	Air velocity [m/s]	**2,60**	Actuated by	**Ready for actuator**
Depth [mm]	**125,0**	Pressure drop [Pa]	**5**		

Damper actuator **GMA126.1E**

Quantity	**1**	Mode	**on/off**	Voltage [V]	**24**
Supplier	**Siemens**	torque [Nm]	**7,000**	Current [A]	**0,21**
				Protection	**IP54**

1 Pcs **FTK+ 270 VVS NTC10K Temperature and humidity probe (0-10V)**

Sound attenuator	Exhaust air	**955,0 mm**	**2,91 m2**	**3 Pa**

Type	**Standard**
Lenght [mm]	**900,0**
Sound attenuator splitter thickness [mm]	**200,0**
splitter frame quality	**Galvanized steel**

Frq [Hz]	63	125	250	500	1000	2000	4000	8000
Abs [dB]	**4,0**	**7,0**	**16,0**	**28,0**	**41,0**	**34,0**	**22,0**	**14,0**

Filter	Exhaust air	**415,0 mm**	**1,16 m2**	**42 Pa**

Manufacture	**Roccheggiani**	
Type	**V-PF-M5-98**	
Class (EN 779:2012)	**M5**	
Class (ISO 16890)	**ePM10 50%**	
Clean dP [Pa]	**21**	
Dirty dP [Pa]	**63**	
Applied dP [Pa]	**42**	
Airflow [m³/h]	**2.300**	**1,22 m/s**
Filter handling	**from side - pullout**	

*** Filter handling is not integrated in the Eurovent certified software range**

Filter length [mm]	**98,0**	
Filter surface [m2]	**1,56**	
Cells pcs x size	**1** x **V-PF-M5-98**	**592,0** x **592,0**
	1 x **V-PF-M5-98**	**290,0** x **592,0**

Revision panel with turn bolt (Central handle) Dimensions [mm] **180,0 x 700,0**

1 Pcs **DPE2500 for airflow measurement** **-**

Empty section	Exhaust air	**1.960,0 mm**	**6,22 m2**	**Pa**

Electric panel **Mounted on board**

Heat wheel in casing	Exhaust air	**580,0 mm**	**2,51 m2**	**199 [Pa]**

Empty section	Exhaust air	**220,0 mm**	**0,58 m2**	**Pa**

Offer	**UTA 24001856**	Position	**2.0**	**airCalc Vers.**	**P 5.0.1 (released on 9/26/2024)**
Project	**DC 30MW IT - Milano**				**26/09/2024**
Position	**UTA Uffici DC01**				

Plug fan	Exhaust air	**1.045,0 mm**	**3,6 m2**	**29 Pa**

Fan	**GR31I-ZID.DC.CR**	Motor	**ECblue-IE5-50-116-0-2.4**	**IE5**
Air volume [m³/h]	**2.300**	Protection	**IP55**	
External static [Pa]	**250**	Insulation class	**F**	
dynamic pressure [Pa]	**11**	Voltage	**3x400 V / 50 Hz**	
Total static pressure [Pa]	**549**	Power [kW]	**2,400**	
Total pressure [Pa]	**560**			
Speed [1/min]	**2.223**	Speed [1/min]	**3.700**	
efficiency %	**64,3**	System absorbed power [kW]	**0,560**	
		nominal current [A]	**3,61**	
Supplier	**Ziehl-Abegg**			
Code	**ZAB-116889/A01-3/400/50**	*The system effect is considered in the performance of the fan*		

K-factor [m³/h] **136** [ρ = 1,2 kg/m³] $(Q = k\sqrt{\Delta p})$

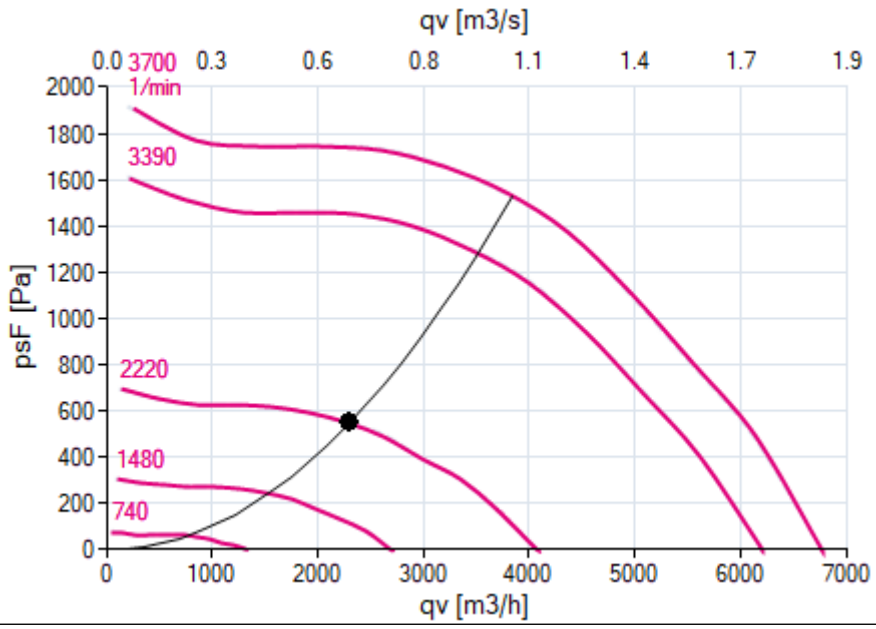
K-factor [adim] **105** $(Q = k\sqrt{\Delta p \frac{2}{\rho}})$

Fan octave band sound power level (Lokt) [dB]

Frq.[Hz]	63	125	250	500	1000	2000	4000	8000
Inlet	**58,0**	**72,0**	**66,0**	**67,0**	**59,0**	**56,0**	**53,0**	**50,0**
Outlet	**61,0**	**76,0**	**70,0**	**69,0**	**70,0**	**69,0**	**65,0**	**62,0**

Control Signal (0-10V) **6,00**

Specific fan power [W/(m3/s)] **818** **SFP2**



1	Pcs	**DPE2500 Flow LCD for airflow measurement**	**-**
1	set	**Tube for airflow measurement**	**-**

Removable panel — Dimensions [mm] **630,0 x 700,0**

Damper: — Dimensions [mm] **551,5 x 410,0 x 125,0**

Width [mm]	**551,5**	Airflow [m³/h]	**2.300**	Material	**Aluminium**
Height [mm]	**410,0**	Air velocity [m/s]	**2,83**	Actuated by	**Ready for actuator**
Depth [mm]	**125,0**	Pressure drop [Pa]	**6**		

Intake / Outlet hood — Dimensions [mm] **600,0 x 410,0 x 380,0**

Width [mm]	**600,0**	Airflow [m³/h]	**2.300**	Material	**Peraluman**
Height [mm]	**410,0**	Air velocity [m/s]	**2,60**		
Depth [mm]	**380,0**	Pressure drop [Pa]	**23**		

Position **UTA Uffici DC01**

Damper actuator	**GMA126.1E**				
Quantity	**1**	Mode	**on/off**	Voltage [V]	**24**
Supplier	**Siemens**	torque [Nm]	**7,000**	Current [A]	**0,21**
				Protection	**IP54**

Opening **L** Dimensions [mm] **280,0 x 280,0**

Noise calculation

Sound power level [dB]

Frq.[Hz]	63	125	250	500	1000	2000	4000	8000	Sum [dB(A)]
Inlet	**52,0**	**62,0**	**46,0**	**34,0**	**12,3**	**15,1**	**23,0**	**27,0**	**46,7**
Outlet	**61,0**	**76,0**	**70,0**	**69,0**	**70,0**	**69,0**	**65,0**	**62,0**	**75,0**
Casing	**48,0**	**63,0**	**59,0**	**58,0**	**60,0**	**56,0**	**34,0**	**21,0**	**63,0**

sound pressure level [dB]

Frq.[Hz]	63	125	250	500	1000	2000	4000	8000	Sum [dB(A)]
Inlet	**44,1**	**54,1**	**38,1**	**26,1**	**4,4**	**7,2**	**15,1**	**19,1**	**38,8**
Outlet	**53,1**	**68,1**	**62,1**	**61,1**	**62,1**	**61,1**	**57,1**	**54,1**	**67,1**
Casing	**40,1**	**55,1**	**51,1**	**50,1**	**52,1**	**48,1**	**26,1**	**13,1**	**55,1**

measuring point at **1 m** of distance

The calculated sound pressure values remain valid only in the case of free and hemispherical radiation from the noise source.
Other sources of noise, the acoustics of the room, other sources of vibration and the installed air ducts can influence these values, so the values possibly measured in the installation site may differ from those indicated.

Baseframe	**BF140**	Material	**Galvanized steel**	Thickness [mm]	**2,0**
Lifting holes [mm]	**56,0**	Height [mm]	**140,0**	Welded	**No**

1 set	**Roof**	**Galvanized prepainted**
1 set	**Unit with regulation**	**-**

Delivery sections

no.	Width	Height	Length	Net weight
1	**1.040,0**	**1.510,0**	**4.220,0**	**994,00**
2	**1.040,0**	**1.510,0**	**1.280,0**	**284,00**

Eurovent EEC Data

	WINTER Supply	WINTER Return	SUMMER Supply	SUMMER Return
Airflow [m³/h]	**2.600**	**2.300**	**2.600**	**2.300**
Total static pressure = internal (without fan sys. effect) + external [Pa]	**893**	**528**	**893**	**528**
Internal static pressure = total static - external [Pa]	**593**	**278**	**593**	**278**
Real power input [kW]	**1,070**	**0,560**	**1,070**	**0,560**
Size reference velocity [m/s]	**1,130**	**1,000**	**1,130**	**1,000**
Temperature efficiency, HRS mass flow balanced [%]	**77,00**	**77,00**	**75,8**	**75,8**
Humidity efficiency, HRS mass flow balanced [%]	**-**	**-**	**72,50**	**72,50**
Pressure drop HRS standard density [Pa]	**189**	**152**	**163**	**148**
Pressure drop HRS standard density (bypass on) [Pa]	**-**	**-**	**163**	**148**
Mixing ratio [%]	**0**		**0**	
Electric re-heater	**No**		**No**	
Design dry-bulb temperature [°C]	**-**		**32,90**	
Design dew-point temperature [°C]	**-**		**17,40**	
Winter design outdoor temperature [°C]	**-0,90**		**-0,90**	
Factor Fs-Pref	**0,79**		**0,68**	

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Fax: 071 / 7304005

Offer	**UTA 24001856**
From date	**26/09/2024**
Project	**DC 30MW IT - Milano**
Position	**2.0**
LV-Position	
Quantity	**1**
Print data	**26/09/2024**
User	

airCalc++ Vers. P 5.0.1

www.roccheggiani.it
ahu@roccheggiani.it

Regulation list

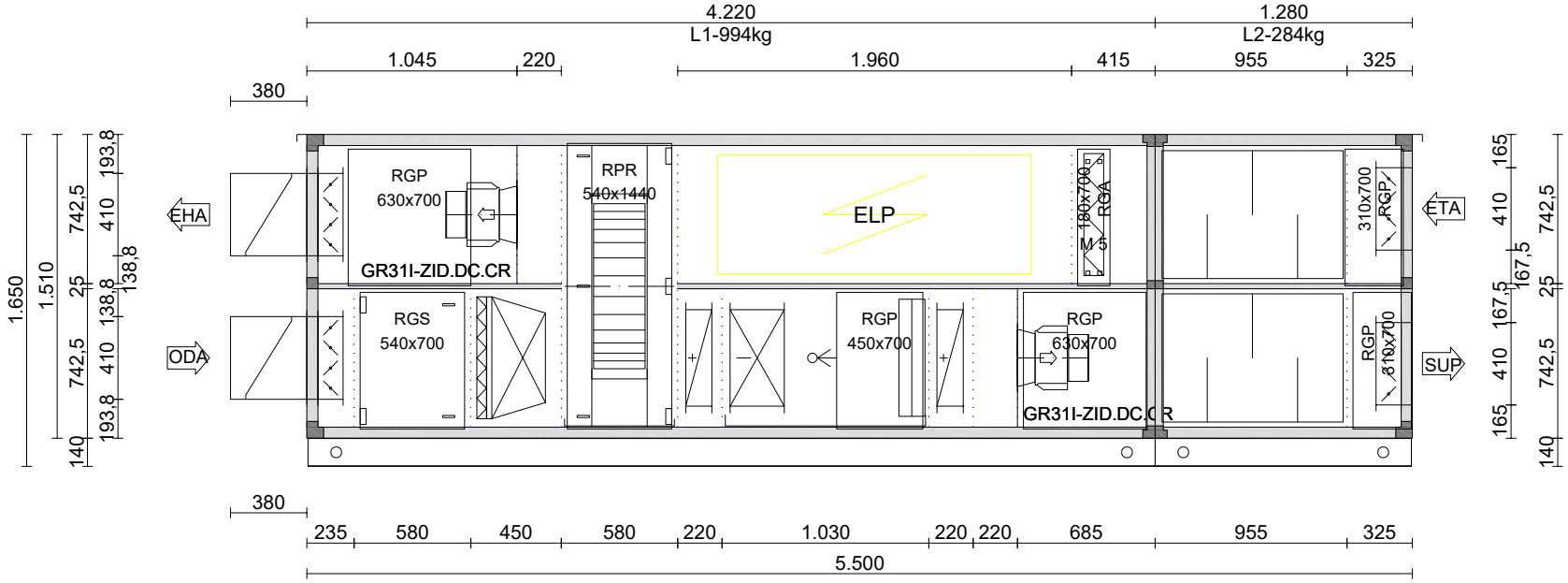
	Electric panel
n. 1	Power and regulation electrical panel. Power supply 400V/3F+N/50Hz
	Start and stop signal. Indication of dirty filters. Motor save protection.
	PCOWEB SE, Ethernet card for IP protocols
	Performance of logical engineering of regulation and drafting of wiring diagrams
	AHU Calibration and functional factory testing included
	Control type External/ambient air
	Temperature and humidity control
	Control type Supply air
	Temperature and humidity control
	Air flow control
	Freeze protection thermostat
	Saturation temperature probe
	Control type Return air
	Temperature and humidity control
	Air flow control
	Additional options
	Room terminal with display, supplied not mounted
	Coil valves and actuators included
	Hydraulic assemblies and accessories included
	Start-up on site
	Included, by specialized technicians

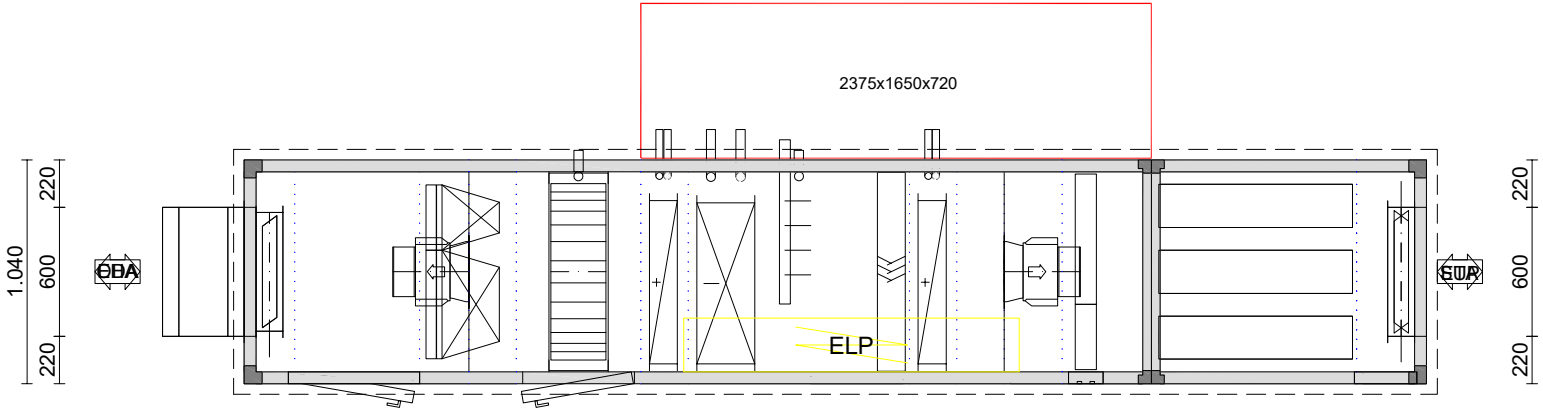
Offer	**UTA 24001856**		airCalc Vers. P 5.0.1
Project	**DC 30MW IT - Milano**		
Position	**2.0**		
Description	**UTA Uffici DC01**	From date	**26/09/2024**

List of material mounted on board

Pos.	QTA	Code	Description
1	1	**COM_CTD**	Power and regulation electrical panel. Power supply 400V/3F+N/50Hz. Start and stop signal. Dirty filters indication.
2	1	**C.PCO**	C.PCO Controller
3	1	**C.PCO-CON**	Removable connector kit for C.PCO
4	1	**SKIT1000.0001**	PGN1000F01 + PGN100FRM1 Display for panel mounting, connectable to the pCO by means of a cable with telephone connector
5	1	**PGN1000W00**	pGD__1__ LCD, 132x64 pixels
6	1	**TCONN6J000**	“T” connector for local network
7	1	**PCO1000WD0**	PCOWEB SE, ETHERNET CARD FOR IP PROTOCOLS
8	1	**AKF10+ NTC10k Carel 250.06**	Temperature probe (-50/150°C)
9	1	**FTK + 270 VVS NTC10k**	Temperature and humidity probe (0-10V)
10	1	**FTK + 270 VVS NTC10k**	Temperature and humidity probe (0-10V)
11	1	**FTK + 270 VVS NTC10k**	Temperature and humidity probe (0-10V)
12	1	**TF30**	Antifreeze thermostat -10 to 10°C 3 m capillar
13	1	**DPE2500**	Controller for differential pressure/airflow, 0-2500 Pa
14	1	**DPE2500**	Controller for differential pressure/airflow, 0-2500 Pa
15	1	**GMA126.1E**	Damper actuator, on-off, with spring return
16	1	**GMA126.1E**	Damper actuator, on-off, with spring return
17	1	**GMA126.1E**	Damper actuator, on-off, with spring return
18	1	**GMA126.1E**	Damper actuator, on-off, with spring return
19	1	**DPE2500 Flow**	Controller for differential pressure/airflow, 0-2500 Pa, with display
20	1	**DPE2500 Flow**	Controller for differential pressure/airflow, 0-2500 Pa, with display
21	1	**VXG44.20-6.3+SAS61.03**	3-port threaded valve DN20, Kvs 6,3, PN16, with actuator (loose supply)
22	1		Saldatura valvola/attuatore, DN 20, sfiato e scarico
23	1	**ALG203**	Malleable cast iron fitting DN20 G1 1/4, set of 3
24	1	**VXG44.15-4+SAS61.03**	3-port threaded valve DN15, Kvs 4, PN16, with actuator (loose supply)
25	1		Saldatura valvola/attuatore, DN 15, sfiato e scarico
26	1	**ALG153**	Malleable cast iron fitting DN15 G1, set of 3
27	1	**VXG44.20-6.3+SAS61.03**	3-port threaded valve DN20, Kvs 6,3, PN16, with actuator (loose supply)
28	1		Saldatura valvola/attuatore, DN 20, sfiato e scarico
29	1	**ALG203**	Malleable cast iron fitting DN20 G1 1/4, set of 3

airCalc++ P 5.0.1 / D 11.2.0





Preliminary drawing

SUPPLY	CTA 10.7		F54TT
Airflow	m³/h		2.600
Ext. pressure	Pa		300
Tot. pressure	Pa		934
Motorpower	kW	1x	2,400
Power supply			400V/3/50Hz
PHW-heating	kW		9,00
PHW-heating	kW		11,00
PCW-cooling	kW		19,98
Energy rec	kW		25,38 / 14,92

EXHAUST	CTA 10.7		F54TT
Airflow	m³/h		2.300
Ext. pressure	Pa		250
Tot. pressure	Pa		560
Motorpower	kW	1x	2,400
Power supply			400V/3/50Hz
Energy rec	kW		25,38 / 14,92

CLIENTE-CUSTOMER:	DBA PRO. S.p.A.	REV. 0 DATA-DATE:	User:
CANTIERE-CONSTRUCTION.:	DC 30MW IT - Milano	POS.-ID: 2.0	
RIFERIMENTO-REF.:	UTA Uffici DC01		
OGGETTO-OBJECT:	CTA 10.7	TIPO-TYPE:	PROJECT-ID.: UTA 24001856
ROCCHEGGIANI. care for air — ROCCHEGGIANI S.p.A?Via 1° maggio, 60021 Camerano (AN)Italy		- .SHEET: - / -	
		scale: xx.xx TOLL.: UNI.EN22768-V	DISEGNO-DRAW.:

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